CLAIMS

What is claimed is:

1. A reactive orange dye containing vinyl sulfone expressed in the following formula 1:

Formula 1

RO NH
$$\frac{6}{7}$$
 8 SO₃M SO₂CH₂CH₂Z

- wherein, M is alkaline metal atom; Z is -O-SO₃M or OC(O)CH₃; R is alkyl group having 1-4 of carbon atom; and a position of C₆ or C₇ is substituted with carbamate group.
 - 2. A process for preparing a reactive orange dye containing vinyl sulfone expressed in the following formula 1, which comprises the steps of:
 - (a) diazotizing aminophenyl- β -ethylsulfone compound of formula 2;
 - (b) condensing in such a manner that alkyl chloroformate is slowly added to neutralized solution of 6(7)-amino-4-hydroxy-2-naphthalenesulfonic acid to prepare 6(7)-alkoxycarbonylamino-4-hydroxy-2-naphthalenesulfonic acid expressed in the following formula (3) at 0-25 ℃ with maintaining pH in the range of 3-6 by means of LiOH or Li₂CO₃; and
 - (c) coupling the reacting mixtures obtained in the above steps of (a) and (b) at 0-5°C with adding a base so as to adjust pH lower than 6.5.

Formula 2

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Formula 3

Formula 1

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wherein, M is alkaline metal atom; Z is $-O-SO_3M$ or $OC(O)CH_3$; R is alkyl group having 1-4 of carbon atom; and a position of C_6 or C_7 is substituted with carbamate group.